**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| Improving Public Safety Communications | ) | |
| in the 800 MHz Band | ) | |
| | ) | WT Docket No. 02-55 |
| Consolidating the 900 MHz Industrial/ | ) | |
| Land Transportation and Business Pool | ) | |
| Channels | ) | |

# REPLY COMMENTS OF THE CONSENSUS PARTIES

Aeronautical Radio, Inc. ("ARINC");
The American Mobile Telecommunications Association ("AMTA");
The American Petroleum Institute ("API");
The Association of American Railroads ("AAR");
The Association of Public-Safety Communications Officials-International, Inc. ("APCO");
The Forest Industries Telecommunications ("FIT");
The Industrial Telecommunications Association, Inc. ("ITA");
International Association of Chiefs of Police ("IACP");
The International Association of Fire Chiefs, Inc. ("IAFC") and
International Municipal Signal Association ("IMSA");
The Major Cities Chiefs Association ("MCC");
The Major County Sheriffs' Association ("MCSA");
The National Sheriffs' Association ("NSA");
National Stone, Sand and Gravel Association ("NSSGA");
Nextel Communications, Inc. ("Nextel");
PCIA – The Wireless Infrastructure Association ("PCIA");
The Taxicab, Limousine and Paratransit Association ("TLPA")

February 25, 2003

## SUMMARY

After three rounds of comments in this proceeding, the record demonstrates that the widely-supported Consensus Plan is the only proposal that will achieve the Commission's goals in this proceeding. The Consensus Plan, developed through an open and fair process, strikes a careful balance among the wide range of licensees affected by CMRS – public safety interference. It will improve public safety communications at 800 MHz with minimal disruption to incumbent licensees, and make available additional near-term 800 MHz spectrum for public safety communications services.

A variety of parties commented on the Supplemental Comments filed herein by the Consensus Parties on December 24, 2002. A number of 800 MHz private wireless licensees filed joint comments supporting the Consensus Plan, as did representatives of the airline industry, as well as the leading national organizations representing the interests of almost every municipal or county government in the United States. Other commenters expressed concerns about particular parts of the Consensus Plan, but still supported critical elements of it, including the necessity of realigning the 800 MHz band to separate cellular and non-cellular systems into separate blocks and establishing specific interference protection measures for non-cellular licensees in the post-realignment environment.

Certain commenters, particularly those representing the cellular wireless competitors of Nextel, and public utility companies, continue to express unsupported criticism of the Consensus Plan without offering any effective solutions. The Consensus Parties respectfully submit that none of this criticism successfully undermines the legality, fairness, and obvious public interest benefits embodied in the Consensus Plan, as

summarized below. Accordingly, the Commission should expeditiously adopt the Consensus Plan and enable its rapid implementation.

*Relocation Fund.* The Commission should reject the conclusory speculation of some commenters that the proposed $850 million Relocation Fund will be insufficient. Contrary to the comprehensive analysis of relocation costs set forth in the Supplemental Comments, these commenters have not substantiated their claims with data or detailed analysis, nor do they offer any viable alternative for funding the costs of realigning the 800 MHz band to address CMRS – public safety interference.

The Consensus Parties wish to clarify certain misunderstandings concerning the Consensus Relocation Fund. First, Nextel's $850 million commitment is for compensating 800 MHz incumbent licenses for the reasonable costs of being required to retune/relocate their systems as required under the Consensus Plan. If Nextel is awarded the 1910-1915/1990-1995 MHz replacement spectrum block, its proportionate payment to UTAM for clearing that spectrum and the costs it would incur for relocating Broadcast Auxiliary Service ("BAS") incumbent licensees from the 1990-1995 channel block *will not come from the $850 million incumbent relocation fund;* Nextel will fund these costs separately above and beyond the incumbent relocation fund. Any retuning costs incurred by Nextel Partners will not come from the $850 million incumbent relocation fund, and Nextel will separately fund its own relocation costs.

*CMRS Industry Opposition.* The CMRS commenters continue to oppose the Consensus Plan despite the fact that it would provide them extraordinary benefits. Despite their denials, cellular carriers are responsible for a significant proportion of CMRS – public safety interference. The Consensus Plan will relieve cellular licensees of

the burden of addressing this interference on a case-by-case basis; at the same time these licensees will not have to retune to new channels nor fund the retuning of 800 MHz incumbents. The Commission should reject the cellular/PCS industry's opposition to the Consensus Plan including its proposal to move all 800 MHz public safety licensees to the 700 MHz band.

*Treatment of B/ILT and H-SMR Licensees.* A minority of 800 MHz private wireless licensees, particularly the United Telecom Council ("UTC") and other parties representing the utility industry, claim that the Consensus Plan will disrupt their operations. These claims ignore a key aspect of the Consensus Plan: 70% of all private wireless incumbents would not have to relocate at all. The Consensus Plan protects the rights of all incumbent Business and Industrial/Land Transportation ("B/ILT") and high-site SMR ("H-SMR") licensees, including those operating in Consensus Plan's proposed Guard Band. In fact, the Consensus Plan will give these licensees greater interference protection than they enjoy today by realigning the 800 MHz band into separate contiguous blocks for noise-limited and interference-limited systems and also by proposing detailed post-realignment interference protection safeguards, which will apply to *all* 800 MHz band licensees, including B/ILT and H-SMR licensees.

The Consensus Parties gave careful consideration to concerns raised by utilities and other private wireless licensees regarding band realignment. In developing a balanced plan that considers the interests of all incumbent licensees, the Consensus Parties propose a number of steps to minimize any disruption to B/ILT and H-SMR operations and ensure that any incumbent licensees that are required to relocate will

receive comparable replacement spectrum and full reimbursement of their relocation costs.

*Case-by-Case Mitigation.* Some parties have proposed that the Commission should rely on case-by-case mitigation to address CMRS – public safety interference instead of realigning the 800 MHz band. Case-by-case mitigation, however, is inherently reactive, responding only after-the-fact to actual instances of interference to police officers' and fire fighters' communications. This approach jeopardizes the lives of first-responders and the public they serve; it is not acceptable to the public safety community or the Consensus Parties and cannot be relied by the Commission as a permanent solution. Second, case-by-case mitigation fails to address the root cause of CMRS – public safety interference: 800 MHz public safety and CMRS systems operating incompatible wireless systems on interleaved, adjacent and mixed 800 MHz channels. Piecemeal technical fixes are not a serious or sufficient response to this fundamental spectrum allocation problem.

*The RCC and the Relocation Process.* Contrary to the assertions of some parties, the comprehensive relocation process proposed by the Consensus Parties, including creation of the Relocation Coordination Committee ("RCC"), would advance the public interest while also protecting the legal rights of all relevant parties. The RCC would be representative of all 800 MHz licensees, and would operate in a consensual "give-and-take" manner. Further, Section 332 of the Communications Act of 1934, as amended, grants the Commission legal authority to certify the RCC as a frequency coordinator that will efficiently implement the mechanical steps of realigning the 800 MHz band in order to mitigate CMRS-public safety interference.

*Border Region Realignment Plans.* Within the confines of the existing international treaties, the Consensus Parties have proposed realignment plans for the Mexican and Canadian border regions as consistent as possible with the Consensus Plan's realignment in the rest of the United States. These plans are intended to ensure that no incumbent licensee will suffer a net loss of spectrum, while separating public safety operations from cellular operations as much as possible to address CMRS – public safety interference. The Consensus Parties believe that careful coordination among the RCC and Border Area representatives will achieve these objectives.

*Assignment of Replacement Spectrum in the 1.9 GHz Band to Nextel.* The Commission should reject arguments by some parties against the Consensus Plan proposal to assign to Nextel replacement spectrum in the 1.9 GHz band. The replacement spectrum Nextel would receive at 1910-1915/1990-1995 MHz is crucial to the effectiveness of the Consensus Plan, as it would make Nextel whole in return for its substantial spectral contributions to the Plan.

*Treatment of Incumbent EA Licensees Operating Cellular Systems.* Some commenters raised concerns regarding the proposal in the Supplemental Comments that non-Nextel EA licensees operating in Channels 1-120 be relocated to comparable existing Nextel EA licensees in Channels 121-400. The Consensus Parties agree that an incumbent EA licensee employing a low-power, low-site cellular (interconnected) architecture, as defined in the Consensus Plan, should be relocated to the cellular channel block, with its relocation costs covered by the Relocation Fund.

*Treatment of Southern LINC.* In their Supplemental Comments, the Consensus Parties adapted the Consensus Plan to address the unique circumstances of Southern

LINC. The Consensus Parties proposed, among other things, to grandfather Southern LINC's system such that it can deploy both high-site and low-site cellularized architectures within its entire licensed footprint, as best meets its business strategy and customer needs. In its comments regarding the Supplemental Comments, Southern LINC makes a new demand for special treatment: it now requests that its 800 MHz facilities be relocated in their entirety to a contiguous block immediately adjacent to the cellular block. This has nothing to do with preventing CMRS – public safety interference and should be denied.

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The Association of Public-Safety Communications Officials-International, Inc. ("APCO"); the International Association of Chiefs of Police ("IACP"); the International Association of Fire Chiefs, Inc. ("IAFC") and International Municipal Signal Association ("IMSA"); the Major Cities Chiefs Association ("MCC"); the Major County Sheriffs' Association ("MCSA"); and the National Sheriffs' Association ("NSA") (collectively, "Public Safety Organizations"); in conjunction with Aeronautical Radio, Inc. ("ARINC"); the American Mobile Telecommunications Association ("AMTA"); the American Petroleum Institute ("API"); Association of American Railroads ("AAR"); Forest Industries Telecommunications ("FIT"); the Industrial Telecommunications Association, Inc. ("ITA"); the National Stone, Sand and Gravel Association ("NSSGA"), PCIA – The Wireless Infrastructure Association ("PCIA"); the Taxicab, Limousine and Paratransit Association ("TLPA") (collectively, the "Private Wireless Coalition") and Nextel Communications, Inc. ("Nextel") (collectively with the Public Safety Organizations and the Private Wireless Coalition, the "Consensus Parties") hereby submit

these Reply Comments in response to the Commission's *Public Notice* regarding the Supplemental Comments filed by the Consensus Parties in this proceeding on December 24, 2002.[1]

## I. INTRODUCTION

In the Supplemental Comments, the Consensus Parties more fully developed certain aspects of their proposal to realign the 800 MHz Land Mobile Radio band to mitigate CMRS – public safety interference ("Consensus Plan"). In particular, the Supplemental Comments provided more information on the following issues:

- Funding the retuning costs of *all* incumbent licensees required to relocate under the Consensus Plan for 800 MHz Realignment.
- Establishing the timeline and mechanics for: (1) relocating 800 MHz incumbent licensees under the Consensus Plan; (2) Nextel relocating from and contributing spectrum in the 700 MHz, 800 MHz and 900 MHz bands to make realignment possible; and (3) granting Nextel replacement spectrum in the 1.9 GHz band.
- Implementing the Consensus Plan in the border areas adjacent to Canada and Mexico.
- Setting forth the interference rights and obligations of all 800 MHz Land Mobile Radio and Commercial Mobile Radio Service ("CMRS") licensees during and after realignment.
- Relocating Southern LINC and non-Nextel Economic Area ("EA") Specialized Mobile Radio ("SMR") licensees from the "new" NPSPAC channels, 806-809/851-854 MHz.

As the Consensus Parties have noted, the widely-supported Consensus Plan is the only proposal that will achieve the Commission's goals in this proceeding; *i.e.*, improving public safety communications at 800 MHz with minimal disruption to incumbent licensees, while making available additional near-term 800 MHz spectrum for

[1] *See* Public Notice, "Wireless Telecommunications Bureau Seeks Comment on 'Supplemental Comments of the Consensus Parties' Filed in the 800 MHz Public Safety Interference Proceeding – WT Docket No. 02-55," DA 03-19 (released Jan. 3, 2003).

public safety communications services.[2] The communications needs of public safety licensees are great and have not diminished since the Commission launched this proceeding.[3] With the Supplemental filing and the close of this comment period, the Commission has a comprehensive record and a solid basis upon which to move forward expeditiously to adopt and implement the Consensus Plan for improving public safety communications at 800 MHz.

A variety of parties commented on the Consensus Parties' Supplemental Comments. A number of 800 MHz private wireless licensees filed joint comments supporting the Consensus Plan, as did representatives of the airline industry,[4] as well as the leading national organizations representing the interests of almost every municipal or county government in the United States. These organizations, the National League of Cities, National Association of Telecommunications Officers and Advisors, the National Association of Counties, and the United States Conference of Mayors,[5] recognize the importance of resolving the CMRS – public safety interference problem and that the

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2 *See Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*, Notice of Proposed Rulemaking, 17 FCC Rcd 4873, ¶ 5 (2002) ("*NPRM*").

3 If anything, the need of public safety licensees to resolve interference from CMRS and to obtain more spectrum, *e.g.*, to advance the goal of interoperability, has increased. *See*, *e.g.*, *Why Can't We Talk?*, released by National Task Force on Interoperability (Feb. 2003).

4 Comments of ARINC, United Airlines, and Northwest Airlines, WT Docket No. 02-55 (Feb. 10, 2003). (ARINC is also a signatory to the Consensus Plan). Unless otherwise noted, all comments cited herein refer to comments filed in WT Docket No. 02-55 on February 10, 2003.

5 Comments of the National League of Cities, National Association of Telecommunications Officers and Advisors, National Association of Counties, and United States Conference of Mayors.

Consensus Plan does so without imposing unanticipated costs on states, municipalities and counties already struggling to meet pressing public safety and public service needs.

Other commenters expressed concerns about particular parts of the Consensus Plan, but still supported critical elements of it, including the necessity of realigning the 800 MHz band to separate cellular and non-cellular systems into separate blocks[6] and establishing specific interference protection measures for non-cellular licensees in the post-realignment environment.[7] Finally, certain commenters, particularly those representing the cellular wireless competitors of Nextel, and public utility companies, continue to express unsupported criticism of the Consensus Plan without offering any effective solutions.

The Consensus Parties reply herein to the significant issues raised by the commenting parties. The Consensus Parties respectfully submit that none of the criticisms expressed in the comments successfully undermine the legality, fairness, and obvious public interest benefits embodied in the Consensus Plan. Accordingly, the Commission should expeditiously adopt the Consensus Plan and enable its rapid implementation.

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[6] Comments of National Association of Manufacturers and MRFAC ("NAM/MRFAC") at 2; Comments of Public Safety Wireless Network ("PSWN") at 3-4; Comments of Nevada Wireless at 2-3.

[7] Comments of NAM/MRFAC at 2; Comments of State of Florida at 5; Comments of Ameren Corp. at 14; Comments of Access Spectrum at 9.

## II. THE CONSENSUS PLAN PROVIDES A BALANCED APPROACH TO SOLVING CMRS – PUBLIC SAFETY INTERFERENCE

### A. The Consensus Plan Was Developed In An Open Process

The Consensus Plan is the product of thousands of hours of effort by a large number of groups representing a broad range of 800 MHz Land Mobile Radio licensees and interests. It was developed through an open process, with any interested party welcome to provide input; indeed, the Consensus Parties took affirmative steps to solicit such input. The Consensus Parties "spent many, many hours meeting with various parties in a legitimate attempt to incorporate their views into the Plan. Regardless of whether the entity or group would ultimately endorse the Plan, [representatives of the Consensus Parties] wanted to ensure that the Proposed Plan would be as comprehensive as possible."[8] Far from being a "private contract" or "negotiated secretly,"[9] the Consensus Plan is the result of an open and fair process.

Furthermore, the Commission has provided any and all interested parties multiple opportunities to comment on the Consensus Plan through two rounds of formal comments specifically addressing the Plan as it has evolved. In addition, any interested person has been and remains free to make oral and written presentations to the Commission through its *ex parte* process. The Consensus Plan has been developed and critiqued in the full light of public scrutiny as guaranteed by the Commission's rulemaking procedures.[10]

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[8] Comments of Smartlink Communications *et al*. ("Joint Commenters") at 5-6.

[9] Comments of the United Telecom Council and the Edison Electric Institute ("UTC/EEI") at 2.

[10] *See* 47 C.F.R. §§ 1.411-1.419.

### B. The Consensus Plan Strikes a Balance Among Divergent Public Safety, Private Wireless and Commercial Mobile Interests.

The Consensus Plan represents a careful balance among often-divergent interests and competing concerns. The Consensus Parties "participated in a process to attempt to reach a compromise which, while not entirely satisfactory to any one party, is nevertheless fair to all parties. This is the nature of compromise, defined as '[a] settlement of differences in which each side makes concessions.'"[11] As a result, the Consensus Plan truly promotes the overall public interest, rather than any individual private interest.

The balance inherent in the Consensus Plan is demonstrated by contrasting it with the extreme positions of some of its detractors. On one extreme, the cellular commenters, CTIA and Southern LINC would relocate all 800 MHz public safety licensees to 700 MHz as the long-term solution to CMRS – public safety interference even though there are substantial legal and financial obstacles.[12] Other commenters, however, oppose any relocation of 800 MHz incumbents; these parties support continued case-by-case interference management measures and undefined "private market agreements" to control interference, notwithstanding that the record demonstrates that a case-by-case approach will not be effective.[13] Similarly, cellular commenters blame CMRS – public safety interference primarily on public safety receiver front-end inadequacies and criticize the

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[11] Comments of Joint Commenters at 4 (*quoting* American Heritage Dictionary (3d ed. 1994)).

[12] Comments of CTIA at 14-15; Comments of AllTel Communications *et al*. ("Cellular Coalition") at 18-19; Comments of Southern LINC at 4.

[13] Comments of UTC/EEI at 3; Comments of National Rural Electric Cooperative Association ("NRECA") at 6-7; Comments of Cinergy at 6-7.

Consensus Plan for insufficiently emphasizing improving public safety receiver design.[14] Yet, Motorola, the leading public safety radio equipment manufacturer, asserts "it is inappropriate to focus on receiver performance as the principal means of providing interference protection for 800 MHz users."[15] Finally, some commenters think the proposed Consensus Plan realignment timetable is too fast,[16] yet CTIA faults the

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[14] Comments of Verizon Wireless at 4-7; Comments of Cellular Coalition at 3-4. What appears to elude the cellular commenters is that the wide front-end of public safety receivers – and the resulting vulnerability of these radios to receiver overload and IM interference – is largely a result of the interleaved allocation in the 800 MHz Land Mobile Radio band. Because of the interleaving of public safety operations across the 806–824/851–869 MHz bands, equipment manufacturers have been compelled to build public safety receivers to be capable of spanning this entire band. Public safety receivers therefore "respond to" not only the desired transmissions from public safety communicators, but also to any strong B/ILT, SMR, CMRS (Nextel, Southern LINC, and cellular) transmissions across the 851-869 MHz band and even to transmissions in the cellular A-band allocation at 869–881.5 MHz. In still other cases, existing public safety receivers have responded to cellular B-band transmissions. New public safety receivers that are designed for dual-band 700 MHz/800 MHz operations appear to also respond to strong signals from the cellular B-band allocation. Only when public safety and commercial channel allocations are no longer interleaved will it be possible to design receivers with narrower front-end filtering that will "hear" only public safety transmissions and filter out other systems' signals within the band. The adoption of public safety receiver standards without fundamental realignment of the 800 MHz band is not a viable solution to CMRS – public safety interference.

[15] Comments of Motorola at 16. In its comments, Motorola asserts that public safety receiver standards alone cannot resolve CMRS – public safety interference. Motorola states that "[w]hile [it] generally supports the adoption of appropriate receiver performance criteria, it is inappropriate to focus on receiver performance as the principal means of providing interference protection for 800 MHz users. Interference is a function of the overall system design and the environment in which the radio operates." Id. It adds that "the only effective way to reasonably ensure interference-free operation is to define the overall environment and to allow manufacturers to design equipment accordingly." Id. At 17.

[16] *See* Comments of Southern LINC at 26-29, Comments of Consumers Energy at iii-iv; Comments of City of Baltimore at 1-2.

Consensus Plan as being too slow given the urgency of eliminating interference to public safety communications.[17]

The positions taken by these Consensus Plan opponents highlight the extraordinary achievement embodied in the Consensus Plan. It articulates a balanced approach incorporating the fundamental separation of noise-limited and interference-limited systems essential to eliminating CMRS – public safety interference while considering the spectral needs of all incumbent 800 MHz licensees. It is easy to argue one particular perspective or private agenda, and it is easier to interpose objections and criticism than to develop a realistic solution to a difficult problem. Commission approval of the Consensus Plan will advance the public interest, convenience and necessity by solving the CMRS – public safety problem, improving public safety communications at 800 MHz, and enabling all 800 MHz licensees to make more effective use of their licensed spectrum.

## III. FUNDING 800 MHz INCUMBENT RELOCATION EXPENSES

### A. No Commenter Has Provided Empirical Evidence Demonstrating That Nextel's $850 Million Commitment Will Not Cover the Retuning Costs of 800 MHz Incumbents Under the Consensus Plan

As described in the Supplemental Comments, Nextel and other Consensus Parties conducted an extensive analysis and investigation to determine the costs of relocating incumbent licensees under the Consensus Plan. This included detailed discussions with public safety and private wireless organizations regarding design concepts, operational methodologies, user requirements, and equipment attributes of their various

[17] *See* Comments of CTIA at 5-6. Ironically, CTIA's unfunded permanent solution – moving all 800 MHz public safety licensees to 700 MHz – would not even commence until the Consensus Plan is nearly completed.

communications systems; the compilation of a comprehensive database of all 800 MHz licensees; field visits to 16 representative public safety systems; and an APCO data collection survey designed to solicit additional information concerning system architectures, operating requirements, and active mobile unit counts on public safety communications systems.[18] In addition, Nextel has gained unmatched expertise regarding relocating/retuning 800 MHz licensees after having retuned nearly 1,000 incumbent 800 MHz licensees out of the "upper-200 SMR channels" as the predominant EA licensee of this spectrum. As NAM/MRFAC stated in their comments, "[t]here is no entity in the United States which has more experience relocating existing users than Nextel."[19] Nextel has also developed a heightened awareness and understanding of both the technical and practical requirements of public safety systems through its involvement in interference mitigation.

As a result of these extensive efforts and expertise of the Consensus Parties, the "information developed in this process may be the most complete and comprehensive compilation of information ever assembled concerning the universe of 800 MHz public safety licensees; it also provides a complete and accurate picture of the retuning required of B/ILT and H-SMR licensees to effectuate the Consensus Plan."[20] This information permitted the Consensus Parties to test, validate, and refine their analysis of the costs of

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[18] *See* Supplemental Comments of the Consensus Parties ("Supplemental Comments"), App. A at A1-A2.

[19] Comments of NAM/MRFAC at 11.

[20] Supplemental Comments, App. A at A2. Accordingly, the Commission need not conduct or require an independent study of relocation costs, as suggested by PSWN. *See* Comments of PSWN at 5. The Consensus Parties' estimates of these costs reflects a comprehensive, accurate analysis, based on the input of a broad array of licensees operating in the 800 MHz band.

relocating both public safety and private wireless licensees under the Consensus Plan. As an additional precaution, the Consensus Parties' analysis was based on a conservative set of assumptions.[21]

As stated in the Supplemental Comments, the public safety entities endorsing the Consensus Plan agree that the Relocation Fund reflects a reasonable estimate of the total realignment costs for public safety licensees.[22] The Private Wireless Coalition "is highly confident that this commitment will cover the reasonable costs of retuning/relocating B/ILT and H-SMR incumbents to comparable channels" under the Consensus Plan.[23] A group of 21 private wireless licensees that operate in the 800 MHz band echoed this confidence.[24] Conducting their own independent analysis, and using "worse-case scenario" assumptions, these parties concluded that the "money pledged by Nextel exceeds" the costs of retuning non-public safety incumbent licensees "by a significant amount."[25] The Commission should therefore reject the conclusory speculation of some commenters that the Relocation Fund will be insufficient. These commenters have not substantiated their claims with data or detailed analysis, nor do they offer any viable alternative for funding the costs of realigning the 800 MHz band to address CMRS – public safety interference.

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21 *See, e.g.*, Supplemental Comments, App. A at A3 ("[T]o assure that its funding commitment is adequate, Nextel used the high end of the cost range for each relocation activity or element in developing its total commitment for funding the retuning of both public safety and private wireless/H-SMR systems.").

22 Supplemental Comments at 6.

23 *Id*.

24 Comments of Joint Commenters at 13-16.

25 *Id.* at 16.

### B. Funding Plan Clarifications

The Consensus Parties wish to clarify certain misunderstandings and apparent confusion concerning the Consensus relocation funding plan. First, Nextel's $850 million commitment is for compensating 800 MHz incumbent licenses for the reasonable costs of being required to retune/relocate their systems as required under the Consensus Plan. If Nextel is awarded the 1910-1915/1990-1995 MHz replacement spectrum block, its proportionate payment to UTAM for clearing that spectrum and the costs it would incur for relocating BAS incumbent licensees from the 1990-1995 channel *block will not come from the $850 million incumbent relocation fund;* Nextel will fund these costs separately above and beyond the incumbent relocation fund. Any retuning costs incurred by Nextel Partners also will not come from the $850 million incumbent relocation fund. Similarly, Nextel will separately fund its own relocation costs.

The Relocation Fund does include, however, reimbursement for the expenses of equipment manufactures in developing the firmware and other modifications necessary to enable mobile and portable public safety and private wireless legacy receivers to operate on the channels to which they will be retuned. The Consensus Parties recognize that certain legacy handset models will need new operating software in order to be retuned from the old NPSPAC channels to the new NPSPAC channels. The incumbent relocation fund includes monies for reimbursing manufacturers for the reasonable cost of these modifications or upgrades.[26]

[26] Furthermore, non-public safety frequency coordination fees will not come out of Nextel's $850 commitment, as such coordination will be unnecessary for non-public safety licensees due to the frequency coordination role played by the RCC. The Consensus Parties would also like to take this opportunity to again suggest that the

## IV. THE COMMISSION SHOULD DISREGARD THE ANTI-COMPETITIVE ARGUMENTS OF THE CMRS INDUSTRY

The CMRS commenters' continue to oppose the Consensus Plan despite the fact that it would provide them extraordinary benefits. Despite their denials,[27] cellular carriers are responsible for a significant proportion of CMRS – public safety interference.[28] For example, cellular operations are the sole or contributing cause of interference in Anne Arundel County, Maryland; Phoenix, Arizona; Denver, Colorado; Miami-Dade County, Florida; Palm Beach County, Florida; Newark, New Jersey; Southfield, Michigan; Oakland, California; Sacramento, California; Baltimore County, Maryland; East Norriton, Pennsylvania; Centre County, Pennsylvania; Horsham Township, Pennsylvania; and Fairfax County, Virginia.[29] The Consensus Plan would relieve cellular licensees of the burdens and spectrum diseconomies associated with *ad hoc* interference mitigation, thereby restoring the operational flexibility they have had to relinquish to mitigate CMRS – public safety interference on a site-by-site basis – all without having to retune to new channels or fund the retuning of 800 MHz incumbents.

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Commission waive its filing fees for applications sent to the Commission as a result of the Consensus Plan.

[27] *E.g.*, Comments of Cellular Coalition at 5.

[28] Comments of Nextel at 6-9. *See* APCO Project 39 Status Report at 6 (Mar. 19, 2002) (attached to Comments of APCO Project 39 Technical Committee filed May 6, 2002) ("*APCO Project 39 Report*") ("it is our firm belief that interference exists anywhere low-HAAT/high-power (or extreme downtilt) sites in the 800 MHz band are operating within the operational footprint of 800 MHz radio systems designed under noise-limited principles. We also believe this to not be a phenomenon isolated to Nextel sites in the footprint of public safety systems. Multiple public safety systems operating in the same geographic area could present the same challenge if their design philosophies differed, as could other commercial carriers.").

[29] Comments of Nextel at 8.

### A. Case-by-Case Mitigation Through the Best Practices Guide is Inherently Reactive and an Ineffective Long-Term Solution to CMRS – Public Safety Interference

The Consensus Parties recognize the value of the Best Practices Guide and urge its continued use as an interim interference mitigation resource pending realignment.[30] At the same time, as has been demonstrated repeatedly in this proceeding, the Best Practices Guide does not by itself constitute an effective overall solution to CMRS – public safety interference. First, case-by-case mitigation is inherently reactive, responding only after-the-fact to actual instances of interference to police officers' and fire fighters' communications.[31] This approach jeopardizes the lives of first-responders and the public they serve; it is not acceptable to the public safety community or the Consensus Parties and cannot be relied upon by the Commission as a permanent solution. Second, case-by-case mitigation fails to address the root cause of CMRS – public safety interference: 800 MHz public safety and CMRS systems operating incompatible wireless systems on interleaved, adjacent and mixed 800 MHz channels. Piecemeal technical fixes are not a serious or sufficient response to this fundamental spectrum allocation problem.

Furthermore, CMRS carriers cannot sustain case-by-case mitigation from a commercial perspective. Over time, this approach severely compromises the spectrum efficiency of both CMRS providers and public safety systems, requiring that significant volumes of 800 MHz spectrum lie fallow or be limited in their use, contrary to basic

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30 Supplemental Comments, App. F at F-1

31 *See* Comments of APCO, NACo, NLC, and NATOA at 2 (May 6, 2002); Comments of IACP, MCC, NSA, and MCSA at 4-5 (May 6, 2002).

spectrum management principles. Exclusive long-term reliance on Best Practices will encourage a patchwork of inconsistent local regulations that threaten the seamless operation of commercial nationwide networks.

### B. Alternative 800 MHz Realignment Plans Are Vague and Lack Realistic Funding

CTIA and Verizon Wireless both state that, if case-by-case mitigation does not resolve CMRS – public safety interference, the Commission could propose an 800 MHz realignment affecting only spectrum within that band.[32] CTIA states that "implementation of the 800 MHz rebanding can begin immediately where needed to mitigate observed interference, with public safety migrating out of interleaved channels on a negotiated, city by city basis," while Verizon Wireless states that "the realignment of the 800 MHz band . . . could be effected through a series of market-based agreements between the incumbent licensees."[33] Similarly, the Cellular Coalition states that "the Commission should also expressly approve the use of private market agreements by Nextel and others, such as case-by-case frequency swaps when other mitigation techniques are ineffective or would degrade operations . . ."[34]

The Consensus Parties have worked cooperatively for months to establish detailed relocation procedures and funding mechanisms that will achieve the Commission's goals in this proceeding. After criticizing the Consensus Parties' efforts as "overly

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[32] Comments of CTIA at 13-14; Comments of Verizon Wireless at 15-16.

[33] Comments of CTIA at 14; Comments of Verizon Wireless at 15. CTIA proposes realignment of the 800 MHz band as an "interim" measure prior to implementation of the 700 MHz Plan.

[34] Comments of Cellular Coalition at 18.

complicated," the cellular commenters put forth 800 MHz realignment proposals that are so uncertain as to preclude evaluation by a regulatory agency, much less draw comparison with the Consensus Plan.[35] Exactly how will a process based on market-based agreements ultimately yield meaningful and effective band realignment? As just one example, how can market-based agreements preserve the years of planning that has gone into the Region-by-Region NPSPAC public safety assignments? The Consensus Plan preserves current NPSPAC channel assignments and coordination by moving the entire NPSPAC block down 15 MHz on a region-by-region basis.[36] How will market-based agreements interface with these considerations? The cellular and utility advocates of this approach give no explanation. They cannot really expect the Commission to give consideration to such empty proposals.

The cellular commenters approach to relocation funding is equally ambiguous. They suggest, for example, that (i) Nextel *might* have incentive to pay for public safety relocations pursuant to private agreements, (ii) proceeds from the auction of 1.9 GHz spectrum *might* be used to cover such costs, and (iii) Congress *might* pass legislation to provide the necessary funds.[37] None of these alternatives are realistic.

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[35] Some Consensus Plan opponents criticize the Plan as unduly detailed and complex. Such criticism misses the point. The level of detail included in the Plan is not a negative, but rather reflects the Consensus Parties' intensive efforts to be both inclusive and comprehensive in accommodating the diverse interests of licensees and users at 800 MHz.

[36] Preserving existing NPSPAC channel coordination is a fundamental objective of the public safety community in effectuating 800 MHz realignment to eliminate CMRS – public safety interference.

[37] Comments of Verizon Wireless at 16; Comments of CTIA at 14.

### C. Relocation of Public Safety Systems to the 700 MHz Band is Neither Operationally Practical nor Politically Feasible

In their comments, CTIA, the Cellular Coalition, and other commenters again claim that the best long-term solution to CMRS – public safety interference is to relocate public safety systems to the 700 MHz band (the "700 MHz Plan").[38] This proposal remains a classic "non-starter," a plan that is neither operationally practical nor politically feasible. The 700 MHz Plan's flaws – discussed briefly below -- have been quite obvious to the public safety community, which is virtually unanimous in its opposition.

Implementation of the 700 MHz Plan could begin in 2007 at the earliest, and likely would be much later. Continued broadcast operations in the 700 MHz band will prevent public safety use of this spectrum in the most heavily populated portions of the nation through the end of the digital television ("DTV") transition; the conditional statutory deadline for the DTV transition is the beginning of 2007. Given the five-year phase-in schedule adopted by the Commission last year for the mandatory installation of over-the-air DTV tuners in most television sets,[39] however, it is unambiguously clear that the statutory DTV penetration threshold of 85 percent will not be met in any market prior to the 2007 DTV transition deadline, and almost certainly will not be satisfied until much later.

Even without these severe broadcast encumbrances, relocating all 800 MHz public safety systems to the 700 MHz band would impose an enormous price tag on public safety operators, without any certain funding source. These operators would have

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38 *See, e.g.*, Comments of CTIA at 14-15; Comments of Cellular Coalition at 18-19.

39 *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television,* MM Docket No. 00-39, Second Report and Order and Second Memorandum Opinion and Order, FCC 02-230 (rel. Aug. 9, 2002) ("*DTV Tuner Order*").

no choice but to spend unprecedented sums to acquire expensive new 700 MHz base station transmitting infrastructure and handsets, with a total cost many times the cost of implementing the Consensus Plan.

## V. THE CONSENSUS PLAN PROTECTS THE RIGHTS OF B/ILT AND H-SMR LICENSEES AND WILL IN FACT SIGNIFICANTLY IMPROVE THE RF ENVIRONMENT FOR ALL 800 MHz BAND LICENSEES

A fundamental factor in the design of the Consensus Plan is that realigning the 800 MHz band into separate contiguous blocks for noise-limited and interference-limited systems will, in-and-of-itself, dramatically reduce the probability of CMRS – public safety interference occurring post-realignment. As we have noted previously, the Consensus Plan will reduce the probability of intermodulation ("IM") interference at locations where NPSPAC public safety systems are currently experiencing interference by as much as 99 percent and *all* licensees in the non-cellular block will receive the benefit of greatly reduced probabilities of intermodulation interference as a result of realignment alone. Nextel's enhanced ability to deploy frequencies in a manner to avoid intermodulation in the first place, will reduce even further the probability of IM interference. Additionally, as a result of realignment, CMRS carriers will be able to implement measures to minimize out of band emissions ("OOBE"), which will further reduce interference.

The Consensus Parties, expect therefore, that the incidence of post-realignment interference of any type will be infrequent as a result of (1) the de-interleaving of the 800 MHz band; (2) Nextel's enhanced ability to deploy channel reuse plans to avoid intermodulation on non-cellular block channels and (3) the ability of CMRS systems to implement additional filtering to limit OOBE. In the few remaining occurrences of

interference involving co-located Nextel and cellular base stations, the interference standards of Appendix F will apply and guide its resolution.

### A. The Consensus Plan's Proposed Post-Realignment Interference Protection Rights Will Apply to All 800 MHz Land Mobile Radio Licensees, Including B/ILT and H-SMR Licensees

Throughout this rulemaking, the Consensus Parties have used the term "CMRS - public safety interference" to refer to interference experienced by high-site, non-cellularized public safety *and* private wireless licensees from the routine operation of low-site, cellular-architecture communications systems co-channel with, adjacent to and/or interleaved with high-site systems in the 800 MHz band, where all involved systems are operating in compliance with the Commission's rules.[40] The Consensus Parties used the term "CMRS - public safety interference" in the same manner in their aforementioned December 24, 2002 Supplemental Comments.

The Consensus Parties wish to confirm that the post-realignment interference-protection measures set forth in Appendix F to the Supplemental Comments are intended to apply to *all* 800 MHz Land Mobile Radio licensees, including B/ILT and H-SMR systems.[41] The Consensus Plan is a comprehensive solution for remedying "CMRS - public safety interference" in the 800 MHz band, which is one of the primary goals of this

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[40] As many commenters have documented in the course of this proceeding, both public safety and non-public safety noise-limited 800 MHz licensees have experienced interference related to the lawful operations of adjacent cellular operators, albeit much less frequently for B/ILT and H-SMR systems. *See generally*, Comments of Harmer Communications at 2 (May 3, 2002); Comments of NAM/MRFAC at 6-8 (May 6, 2002); Comments of Joint Comments at 2-6 (May 6, 2002); Comments of Supreme Radio Communications, Inc. at 9-10 (May 6, 2002).

[41] *See*, Supplemental Comments, App. F at F-1 and n. 2, stating, "[t]hese policies and procedures would also apply to interference between non-public safety noise limited systems in the non-cellular block and CMRS systems."

proceeding. References to CMRS – public safety interference, therefore, should be understood to include interference experienced by all non-cellular incumbents from otherwise lawful cellular operations in the new cellularized block and the cellular A and B band licensees. In short, the Consensus Plan provides all 800 MHz non-cellular block licensees with unprecedented protection from interference caused by 800 MHz low-site, cellular-architecture systems.

### B. All Post-Realignment Non-Cellular Block Licensees Will Receive New Levels of Protection From CMRS – Public Safety Interference

In the Supplemental Comments, the Consensus Parties created as Appendix F a comprehensive proposal to mitigate interference should there continue to be any CMRS – public safety interference problems after re-banding has been completed. Several questions have been raised about this proposal, for which the Consensus Parties are pleased to provide additional information.

First and foremost, it should be made clear that no existing incumbent licensee will need to change its existing, constructed system in any way (except for potential frequency changes pursuant to realignment) in order to be protected from CMRS – public safety interference, as discussed further below. The –98 dBm threshold signal strength for existing non-cellular systems reflects two underlying principles: (1) if a non-cellular block licensee has sufficient signal at the interference location to meet its performance objectives (e.g., 20 dB C/I + N for an analog voice system), then CMRS operators would be required to correct the interference; and (2) no CMRS operator should be held accountable for the coverage inadequacies of a non-cellular operator.[42] The extensive

[42] As discussed below, in most interference cases to date, the complaining licensee's signal strength was greater than –98 dBm.

discussion with regard to requiring the incumbent licensee to have a signal strength of -95 dBm is meant to refer only to newly constructed 800 MHz systems, either first-time systems or replacement systems.

Land mobile radio systems in every band are operating in a much more hostile environment than was the case two or three decades ago. CMRS signals are not the only form of radio energy creating this environment; inventory control systems, computers, and other new wireless devices are also factors in creating a more difficult land mobile operating environment. Furthermore, land mobile operators, both public safety and non-public safety, are discovering they need to provide in-building coverage with handheld radios; neither the industry nor the Commission considered the operational challenges of achieving such coverage in establishing the initial service rules for the 800 MHz band. These factors, both the result of technology advancements that were only dreams a few decades ago, mean that future land mobile systems must be more stringently designed; *i.e.*, it will no longer be as easy as merely sticking an antenna on the tallest tower.

*The Consensus Parties anticipate that Appendix F (and an updated Best Practices Guide) will rarely be needed once realignment has been completed.* Realignment will substantially (if not completely) eliminate IM interference for 800 MHz licensees by virtue of three factors: (1) moving NPSPAC systems farther from cellular systems will significantly reduce cellular systems as interference-causing factors; (2) the de-interleaving of Nextel's operations immediately reduce the number of IM "hits" below 861 MHz; and (3) the elimination of Nextel's site-by-site licenses below 861 MHz will give Nextel flexibility in channel deployment it does not enjoy today, thereby providing Nextel greater ability to avoid IM "hits" in the system design phase. In addition, the

separation of non-cellular and cellularized systems will enable cellular licensees (Nextel and Cellular A and B carriers) to effectively filter their base-mobile transmissions, thereby virtually eliminating OOBE as a source of CMRS-public safety interference.[43] *In the rare cases where IM interference still occurs, however, Appendix F and the Best Practices Guide will provide a framework for: (1) defining whether interference exists; (2) measuring interference; and (3) mandating the mitigative steps to be taken.*

In crafting Appendix F, the Consensus Parties involved engineers that have implemented virtually every type of 800 MHz system. Participants included Nextel's own engineers, engineers representing public safety licensees, consultants to Motorola, and engineers who have implemented public safety and non-public safety systems nationwide. Most of these participants were also involved in APCO's Project 39, and each is very familiar with the problems presently experienced in the 800 MHz band. These engineers recognized the need to more carefully plan and implement future 800 MHz systems, but at the same time ensure that existing systems would not need to undergo retrofitting, such as adding sites, to qualify for protection from co-channel, adjacent channel, intermodulation and OOBE-based interference in a post-realignment environment.

At the end of the discussions, the engineering group agreed to the sum and substance of Appendix F, while also recognizing the need to continue work on

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[43] This will further reduce the probability of interference for all non-cellular licensees. Appendix F calls for increased filtering at all Nextel, Cellular A and Cellular B base stations; it may be acceptable, however, to exempt base stations in locations where CMRS-public safety interference is unlikely to occur. See Motorola Comments at 15.

measurement techniques for the signal levels discussed in the Appendix.[44] Appendix F represents an extraordinary cooperative effort by public safety, non-public safety and Nextel engineers.

The Consensus Parties note that in about 95 percent of CMRS – public safety interference cases, the complaining licensee's on-street signal strength was – 98 dBm or greater at the point of interference; accordingly, if an 800 MHz CMRS licensee was causing the interference and Appendix F were in effect, it would have to mitigate it. The Consensus Parties see no reason why this will not continue to be the case. Contrary to the assertions of some commenters, Appendix F would not require non-cellular block incumbents to undertake widespread system upgrades. An incumbent would have to improve its signal at a particular location *only if* CMRS – public safety interference occurs, and *only if* the incumbent's signal strength is below – 98 dBm at that location, and *only if* the incumbent wants a contributing CMRS carrier to be required to undertake mitigation.[45]

### C. Guard Band Licensees Will Receive Greater Interference Protection Than They Enjoy Today

The Consensus Plan proposes to create a 2 x 2 MHz Guard Band at 814-816/859-861 MHz immediately adjacent to the new cellular block to provide further protection for

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[44] The Consensus Parties acknowledge the importance of the measurement techniques, and are committed to resolve that issue as quickly as possible.

[45] In other words, if the incumbent found the interference tolerable, it would not have to improve its signal. The incumbent has to improve its signal only if it wants a contributing CMRS carrier to be required to undertake mitigation, if mitigation is still necessary despite the incumbent's improved signal at that location.

public safety systems operating below 814/859 MHz in the realigned band.[46] This Guard Band spectrum would be assigned primarily to campus-type B/ILT systems and other "interference-resistant" B/ILT and H-SMR systems.[47] The United Telecom Council and the Edison Electric Institute ("UTC/EEI"), as well as other parties representing utilities, object to this proposal, claiming that it will relegate them to "near-secondary status" in the 800 MHz band and subject them to increased levels of harmful interference.[48]

These claims grossly misrepresent the Consensus Plan. They are contradicted by positions the private wireless community itself has taken in previous proceedings and ignore a key aspect of the Consensus Plan: the plan protects the rights of all incumbent B/ILT and H-SMR licensees, including those operating in the proposed Guard Band, and will in fact give them greater interference protection than they enjoy today.

The Consensus Parties gave careful consideration to concerns raised by utilities and other private wireless licensees regarding band realignment.[49] In developing a balanced plan that considers the interests of all incumbent licensees, the Consensus Parties propose a number of steps to minimize any disruption to B/ILT and H-SMR operations and ensure that any incumbent licensees that are required to relocate will receive comparable replacement spectrum and full reimbursement of their relocation

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46 Reply Comments of Consensus Parties at 9 (filed Aug. 7, 2002).

47 Supplemental Comments at 10. The RCC will consider requests by non-public safety licensees in the Guard Band to relocate outside of the Guard Band; these licensees would be responsible for all of their own relocation costs. *Id.* at 10 n.14.

48 Comments of UTC/EEI at 13. The allegation that the Consensus Plan has changed with regard to the type of licensees that would be relocated to the Guard Band is incorrect, as demonstrated herein.

49 *See* Comments of Joint Commenters at 6-7.

costs. First, over 70% of all H-SMR and B/ILT incumbent licensees will *not need to be relocated*. Only those incumbent H-SMR and B/ILT licensees operating in Channels 1-120 (the new NPSPAC block) will need to relocate.[50] Second, licensees required to relocate nonetheless will be able to remain in the 800 MHz band and, in the vast majority of instances, will only have to retune rather than replace their equipment. Third, these licensees will be ensured comparable replacement facilities as measured by a set of detailed criteria set forth in Appendix C to the Supplemental Comments. Fourth, these licensees will be entitled to reimbursement of their relocation costs. Fifth, H-SMR and B/ILT licensees will have the option of voluntarily relocating to the 900 MHz band where they will receive "2 for 1" replacement spectrum.

The Consensus Plan proposes to assign B/ILT and H-SMR licensees relocating from the new NPSPAC channel block (channels 1-120) to spectrum in the Guard Band because these channels will provide comparable in-band replacement facilities better suited to non-public safety than public safety use.[51] Typically, B/ILT and H-SMR systems are significantly more resistant to interference from CMRS operations in the adjacent cellular block than public safety systems. Unlike public safety systems, B/ILT licensees tend to operate "campus-like" or localized communications services that are

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[50] UTC/EEI consequently mischaracterize the record when they state that "the guard band is to be the preferred home for *all* non-public safety licensees[.]" Comments of UTC/EEI at 11.

[51] The new NPSPAC block may be different in the U.S./Canada and U.S./Mexico Border Areas due to the 800 MHz allocations between those countries. The Consensus Parties have used the term "channels 1-120" to reflect the general realignment of incumbents in the part of the 800 MHz band who will be required to relocate, however, this concept includes any incumbent licensees who are required to relocate to allow the relocation of the NPSPAC band in the Border Areas as well.

less likely to be "overpowered" by CMRS interference. As the LMCC has stated in another proceeding, "private wireless licensees, unlike commercial providers, offer 'localized' or 'campus-like' services and only require limited operating areas."[52] In this proceeding, the Private Wireless Coalition ("PWC") has stated "campus systems tend to be more immune to interference from cellular system architectures because they can better control their operating environment, making them the 'best neighbor' to cellularized systems."[53] In addition, many B/ILT and H-SMR systems are owned by private or commercial enterprises that have significantly greater financial resources than state and local public safety agencies. B/ILT and H-SMR systems consequently tend to have newer, more advanced facilities that have more robust interference protection characteristics.

B/ILT and H-SMR licensees thus make "good neighbors" to adjacent-band cellular operations as well as similar architecture public safety communications systems. Indeed, even private wireless entities that have not endorsed the Consensus Plan recognize this. In a proposal filed early in this proceeding, NAM and MRFAC recommended placing B/ILT and H-SMR licensees in a contiguous block of spectrum separating a proposed contiguous public safety block and a contiguous cellular block in the 800 MHz band.[54]

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[52] Comments of Land Mobile Communications Council at 3 (filed Jan. 18, 2000 in WT Docket No. 99-168).

[53] Comments of Private Wireless Coalition at 20-21 (May 6, 2002).

[54] *NPRM* ¶¶ 21-22 (summarizing proposal).

The radio frequency environment in the proposed 800 MHz Guard Band (channels 321-400) is similar to that of the 700 MHz Guard Band channels – a buffer between public safety and commercial (cellularized) spectrum allocations and services. Significantly, the fact is that the Consensus Plan will substantially *improve* the RF environment for 800 MHz B/ILT and H-SMR licensees, including those in the proposed Guard Band. These licensees currently operate on channels that are interleaved with channels used by Nextel for low-site, low-power, cellular operations. Moreover, while the FCC has established co-channel spacing requirements, its rules provide no specific adjacent channel, intermodulation protection, or other technical interference protection requirements for 800 MHz Land Mobile Radio licensees. In contrast, the Consensus Plan would realign the 800 MHz band to eliminate the interleaving of cellular and non-cellular systems, and establish a comprehensive set of interference protection measures that, for the first time, establish standards to protect against adjacent-channel interference, including intermodulation and OOBE. The Consensus Plan provides greater interference protection to licensees in the Guard Band channels than they have recourse to today (without a Guard Band) and the Consensus Parties – including representatives of many of the leading national private wireless licensee organizations in the nation – believe that the vast majority of private wireless systems will be able to operate free from "CMRS – public safety interference" on Guard Band channel assignments. These interference protection improvements and RF environment certainty will enable licensees to design and implement system changes in the future based on clear criteria that guarantees protection against interference.[55]

[55] Some commenters assert that in the Guard Band, the "average base station will

As one set of private wireless commenters stated, "the [Private Wireless Coalition] has made it clear to everyone that Guard Band licensees should not have 'lesser rights' than they enjoy today. In fact, the Consensus Plan significantly strengthens those protections for all incumbent 800 MHz licensees by incorporating a specific interference standard."[56]

### D. Incumbent EA Licensees Should Be Relocated to the Cellular Block Upon Demonstrating Their Deployment of Cellular Architectures

The Supplemental Comments proposed that non-Nextel EA licensees operating in Channels 1-120 be relocated to comparable existing Nextel EA licensees in Channels 121-400.[57] Several non-Nextel EA licensees raised concerns with this proposal.[58] Nevada Wireless, for example, supported the Consensus Plan but noted, however, that its system uses a cellular architecture and that its site-specific and EA-licensed facilities need to be relocated to the cellular block at Channels 401-720.

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lose 70-75 percent (70-75%) of its usable coverage area." Comments of UTC/EEI at 12. The Commission should reject such hyperbole. These commenters are misrepresenting the requirement in the Consensus Plan that thresholds for interference protection rise through the spectrum allocated for Guard Band service. The fact that thresholds for interference protection rise through the spectrum allocated to the Guard Band does not change the projected on-the-street signal level of either the typical non-CMRS operation or the typical CMRS operation. They should remain essentially as they are today. That being the case, unless private wireless operators are experiencing a 70 to 75 percent loss in range TODAY from the operations of CMRS operators and parties can document that fact, then the claim by these commenters is without foundation.

56 Comments of Joint Commenters at 6.

57 Supplemental Comments at 20-21.

58 Comments of Nevada Wireless at 4-7; Comments of Preferred Communications at 7-14; Comments of Mobile Relay Associates at 7-18.

The Consensus Parties agree that an incumbent EA licensee offering interconnected telephone service employing a low-power, low-site cellular architecture should be relocated to the cellular channel block, with its relocation costs covered by the Relocation Fund. In other words, a non-Nextel EA licensee which has deployed service over a large geographic area with (1) more than five overlapping interactive sites featuring hand-off capability; and (2) sites with antenna heights of less than 100 feet above ground level on HAATs of less than 500 feet; and (3) sites with more than 20 paired frequencies, could be relocated to the cellular block.[59] Such EA licensees would receive contiguous spectrum comparable to the existing "white space" on their current EA licensed frequencies and would be assigned to the lowest channels available beginning with Channel 401.[60]

[59] This is the definition of a cellular-like architecture adopted by the Consensus Parties for determining which incumbents may remain in the non-cellular block. It was used by the Private Wireless Coalition in its Comments prior to joining the Consensus Parties and is based on the Commission's *Second Report and Order* in the 700 MHz Guard Band proceeding. *See* Comments of Private Wireless Coalition at 8 (May 6, 2002); *Service Rules for the 746-764 and 776-794 MHz Bans, and Revisions to Part 27 of the Commission's Rules*, Second Report and Order, 15 FCC Rcd 5299 (2000).

[60] To the extent a non-Nextel EA licensee has not reached its five-year construction benchmark and thus has not constructed its network, it would not be eligible for relocation to the cellular block *unless* the licensee can demonstrate a binding commitment to deploy a low-site, low-power cellular design systems, in accordance with the cellular definition set forth above. The Commission must not permit realignment to be misused by speculators attempting to position themselves to create an exit strategy based on being retuned to the cellular channel block. The Consensus Plan is intended to assure that incumbent licensees do not lose spectrum in realignment.

### E. Encouraging the Buildout of New Systems on Post-Realignment Channels Will Facilitate the Relocation Process

The Supplemental Comments stated that the:

> Consensus Parties recognize that some 800 MHz licensees, including a number of public safety communications licensees, plan to commence new 800 MHz system deployments during the proposed relocation period. … The Consensus Parties recommend that the Commission direct such licensees, from the effective date of the Report and Order herein, to construct such stations and systems on the channels they will be licensed on post-realignment, to the extent possible, thereby avoiding the unnecessary cost and inconvenience of relocating such recently-constructed facilities.[61]

Motorola raised concern with this proposal, stating that "the RCC's activities should neither create undue delays in the implementation of public safety systems already under development nor have a 'chilling effect' on the design of new 800 MHz public safety systems."[62] The Consensus Parties agree that the realignment process must not disrupt public safety system planning or deployment. At the same time, *where feasible*, licensees should avoid deploying new systems on frequencies that would soon after need to be retuned to a new set of frequencies under the proposed realignment. This would result in inefficient use of resources and needlessly disrupt the licensee's operations. The Consensus Parties continue to submit that this matter can be best addressed on a case-by-case basis through the RCC taking into account all of the relevant facts and circumstances of the particular public safety system.

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[61] Supplemental Comments at 16-17.

[62] Comments of Motorola at 7-8.

## VI. THE CONSENSUS PLAN RELOCATION PROCESS WILL PROTECT ALL INCUMBENT LICENSEE INTERESTS AND EXPEDITE REALIGNMENT WHILE MINIMIZING DISRUPTION

The comprehensive relocation process proposed by the Consensus Parties, including creation of the RCC, would advance the public interest while also protecting the legal rights of all relevant parties. The RCC would be representative of all 800 MHz licensees, and would operate in a consensual "give-and-take" manner. Further, Section 332 of the Act clearly grants the Commission legal authority to certify the RCC as a frequency coordinator that will implement the mechanical steps of realigning the 800 MHz band in order to mitigate CMRS-public safety interference. In order to accomplish this important task, however, it is crucial that the RCC have access to all relevant information regarding the technical specifications of the current systems of relocating incumbents.

### A. Function and Purpose of the RCC

The Consensus Parties believe that there have been misunderstandings about the function and purpose of the RCC. First, the RCC and all of its attendant procedures were not intended to be accepted "as is" but were intended for further discussion by the LMCC given the experiences of the land mobile radio industry during the Upper-200 SMR relocation process. In fact, a committee established by LMCC, which includes opponents of the Consensus Plan, has already been established to examine how the RCC should best work. The Consensus Parties expect that LMCC will arrive at an agreement on a format that meets essential purposes of the RCC proposal, as discussed herein.

Realigning the 800 MHz spectrum is functionally similar to prior license "swaps" for the Upper-200 SMR channels in the 800 MHz band, and the incumbent microwave

relocation for PCS providers. The Consensus Parties expect that the ultimate process will be a combination of both prior efforts: (1) items eligible for reimbursement, incumbent rights and channel swaps similar to the Upper-200 channel process; and (2) a cost reimbursement mechanism similar (but not identical) to the microwave relocation process.

There are several significant differences, however, in this proceeding from the prior two proceedings. In the Upper 200 re-relocation process, for example, the progress of any one incumbent's "swap" with Nextel (or any other Upper-200 EA licensee) had no impact on the channel swaps of any other incumbent in the same area. In this proceeding, however, each incumbent's move is an integral part of every other incumbent's move, in terms of the timing of the relocation and the particular frequency selected. Thus, any delay in the movement of any single licensee in a market, either because the parties cannot agree on a set of frequencies or because the parties cannot reach a financial agreement, causes significant delays for every other incumbent in that region.

In addition, in the Upper-200 relocation process, most of the impacted licensees were commercial operators, and many were of significant size, and were therefore well aware of the Commission's processes and requirements. In this realignment, there will be a number of private internal-use licensees relocated within the 800 MHz band (particularly from the General Category frequencies) who are unfamiliar with the Commission's processes in general and this proceeding in particular. Further, many public safety licensees (and small internal-use licensees) who will be relocated under the Consensus Plan Proposal do not have in-house engineering expertise to be able to review regional re-banding plans. Finally, some parties to be relocated under the Consensus

Plan may simply not trust working directly with Nextel to effectuate their relocation to alternative frequencies. Again, delays in any licensees' relocation will only lead to delays for all licensees in the region, including ultimately, the NPSPAC relocation. This would be an unacceptable result and must be prevented.

For all of these reasons, the Consensus Parties believed that a process could be created whereby an "intermediary group" could be established to aid in creating as smooth a transition as possible in this complicated process.

Contrary to the beliefs of some commenters[63] the RCC is not to consist of *organizations* which are only in place to reap financial benefits from realignment, but rather the RCC is meant to consist of *individuals* from LMCC member organizations (and Nextel) with the proper skill sets necessary to: (1) educate incumbent licensees nationwide on the relocation process; (2) create a regional bandplan; (3) handle the payment of escrowed funds to incumbents at the agreed-to intervals; (4) mediate disputes between incumbents and Nextel, prior to the need for Commission intervention; and (5) create a mechanism for ensuring that spectrum reclaimed from Nextel at 800 MHz (and not re-used in re-banding) is preserved (temporarily) for public safety licensees, while ensuring that non-Nextel "white space" may still be used by non-public safety applicants.

To accomplish this task, the skill sets needed for this process for individuals participating in the RCC include (but are not limited to): (1) experience in actual realignment; (2) experience in land mobile spectrum management; (3) experience in payment systems such as that involved in the microwave clearinghouse function; (4) knowledge of the Commission's relocation and coordination rules; and (5) familiarity

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[63] *See* Comments of Southern LINC at 26; Comments of Cinergy at 31-32; Comments of Entergy at 18-19; Comments of Consumers Energy at 25.

with each Region's NPSPAC allocation (hence the need for local public safety coordinator review).

No licensee will be deprived of their due process rights as a result of the establishment of the RCC. Once established, regional realignment would begin with the RCC drafting a proposed "band plan" for that Region. Each and every licensee in that Region would have the ability to review and comment on the proposed band plan and work with the RCC concerning its realignment within the timeframes that are established for each Region's planning process. However, like the frequency coordination process, by having a process whereby the band plan has already been reviewed by licensees prior to submission to the Commission, it can be expected that the chances of continued opposition will be minimized, and the realignment can move forward more expeditiously.

Similarly, the RCC will not be the last resort with regard to individual disputes on compensable relocation costs. Rather, as discussed above, the RCC will act as a "middle-man" to ensure that all compensable costs are included, but non-compensable costs are not. The list of compensable costs should be similar to the Upper-200 proceeding, including the ability for incumbents to utilize their own consultants, if they so choose. Then, if a dispute continues to exist that the RCC is unable to resolve, the incumbent will still have recourse before the Commission. Again, the intention is that all of these issues must be resolved within tight timeframes so that relocations of all incumbents is not delayed.

Incumbent licensees will not be asked, or required to, have their applications prepared by the RCC (incumbents are free to have anyone prepare their applications).

However, the RCC must be able to review every application, to ensure that it complies with that Region's realignment plan.

As described further below, the Consensus Parties believe that the five-person RCC is the appropriate size for such a body. The Consensus Parties are concerned that if the number of people involved in the RCC is significantly increased with people with redundant skill sets, it will do nothing other than add unnecessary delay to the process. The clamor of "we must be represented, we must be represented" creates the impression that the RCC is a mini-FCC. The RCC is not a public relations or financial opportunity, it is designed to create the opportunity for the most efficient re-banding process possible.

### B. The RCC Will Be Representative of All 800 MHz Licensees

The Consensus Parties wish to set the record straight regarding the composition and impartiality of the RCC. Notwithstanding claims to the contrary,[64] the RCC would be truly representative of all 800 MHz incumbents subject to relocation under the Consensus Plan, and would carry out its duties without bias against or favoritism toward any particular licensee or class of licensee. As explained in the Supplemental Comments,[65] four of the five members that comprise the RCC would be designated by the LMCC from among its membership. The LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile radio equipment.[66] The LMCC

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64 *See*, *e.g.*, Comments of Southern LINC at 26; Comments of Boeing at 25-26; Comments of UTC/EEI at 8-10; Comments of NAM/MRFAC at 12-13.

65 Supplemental Comments at 15-16 & App. C at C-5 (explaining that two representatives would be designated from the LMCC's public safety membership, and two from its private wireless membership).

66 *See* letter from Larry A. Miller, President LMCC, to Michael K. Powell, Chairman FCC, filed in ET Docket No. 02-135 (Jan. 27, 2003).

acts with the consensus, and on behalf of, the vast majority of public safety, business, industrial, private, commercial and land transportation radio users, as well as a diversity of land mobile service providers and equipment manufacturers.[67]

The fact that 80 percent of the RCC would be designated by and from the membership of an organization as comprehensive, diverse, and impartial as the LMCC ensures that the RCC would be truly representative of the various categories of 800 MHz licensees and end users. This fact also ensures that the composition of the RCC would not be determined without first giving every member of the LMCC the opportunity to participate in the consensual process of designating an RCC membership that is representative and unbiased. Indeed, some of those expressing these concerns are themselves LMCC members and thus will have a voice in selecting an RCC membership that represents all 800 MHz interests.

The final RCC member would be Nextel, the holder of the largest number of licenses in the 800 MHz band and the licensee that will relocate more often than any other in the process. As the record in this proceeding reflects, no realignment of the 800 MHz band that will effectively resolve the CMRS – public safety interference problem can occur without substantial and pervasive impact on Nextel. Moreover, Nextel has the experience of successfully relocating nearly 1,000 incumbents from the upper 200 SMR channels to other 800 MHz assignments. For these reasons, as well as Nextel's

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[67] LMCC's membership includes: UTC, ARINC, American Association of State Highway and Transportation Officials ("AASHTO"), American Automobile Association (AAA), AMTA, API, AAR, APCO, Central Station Alarm Association ("CSAA"), FIT, Forestry-Conservation Communications Association ("FCCA"), ITA, Intelligent Transportation Society of America ("ITS America"), IAFC, International Association of Fish and Wildlife Agencies ("IAFWA"), IMSA, MRFAC, Inc. ("MRFAC"), National Association of State Foresters ("NASF"), PCIA, and the Telecommunications Industry Association ("TIA").

commitment to fund the costs of incumbent realignment under the Consensus Plan, Nextel should be represented on the RCC.

The RCC and its two working committees would operate based on consensus rather than a simple majority vote.[68] Thus, there is no risk that particular members on the RCC would be unable to protect their interests because the other members would outvote them. Moreover, any licensee that is affected by an action of the RCC can raise its concerns with the RCC both during and after the channel realignment planning process. The RCC will consider such concerns, and will make decisions pursuant to a give-and-take process.

Finally, the RCC would be established solely to *implement* the mechanical steps of the 800 MHz band realignment process. The RCC would not function as a policy-making body, but merely would carry out certain frequency designation and coordination, dispute resolution and licensing application responsibilities during the realignment process.

### C. The FCC Has the Legal Authority To Establish the RCC

The RCC would operate as a frequency coordinator in the private land mobile service, and would be certified as such pursuant to Section 332(b) of the Act. That subsection states, in relevant part, that:

> The Commission, in coordinating the assignment of frequencies to stations in the private mobile services and in the fixed services (as defined by the Commission by rule), shall have the authority to utilize assistance furnished by advisory coordinating committees consisting of individuals who are not officers or employees of the Federal Government.[69]

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[68] Supplemental Comments at 18 ("The Phase I Planning Committee will act by consensus.")

[69] 47 U.S.C. § 332(b)(1).

Pursuant to this express authority, the Commission has certified several frequency coordinators in the private land mobile radio service, including in the 800 MHz band.[70] It is thus clear that the Commission has the legal authority to certify the RCC as a frequency coordinator in the private land mobile radio service.

Notwithstanding this legal authority, several commenters have argued that the creation of the RCC would be unlawful because it would violate the Government Corporation Control Act ("GCCA"),[71] Section 155(c)(1) of the Communications Act,[72] the Federal Advisory Committee Act ("FACA"),[73] and the Fifth Amendment of the U.S. Constitution.[74] As explained below, these arguments are without merit.

*GCCA.* The GCCA states that a federal "agency may establish or acquire a corporation to act as an agency only by or under a law of the United States specifically authorizing the action."[75] As explained above, the RCC would be established as a frequency coordinator by and under an express law of the United States – namely, Section 332(b) of the Act. Thus, even if the members of the RCC elect to organize in

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70 *See International Association of Fire Chiefs, Inc. et al.*, Order, 16 FCC Rcd 14530 (2001) (certifying IAFC/IMSA and AASHTO as a frequency advisory committees for the private land mobile radio 800 MHz public safety frequencies). *See also Frequency Coordination in the Private Land Mobile Radio Services*, Report and Order, 103 F.C.C.2d 1093 (1986) (adopting rules regarding frequency coordination pursuant to section 332(b) of the Act, and certifying APCO as frequency coordinator for the public safety frequencies in the 806-821/851-866 MHz band).

71 *E.g.*, Comments of Cinergy at 16-20; Comments of Southern LINC at 14-16.

72 *E.g.*, Comments of Cinergy at 21-25; Comments of Southern LINC at 16-18; Comments of Consumers Energy at 23-24.

73 *E.g.*, Comments of Cinergy at 25-29; Comments of Southern LINC at 19-21; Comments of Consumers Energy at 24-25.

74 *E.g.*, Comments of Cinergy at 29-33; Comments of Consumers Energy at 25-26.

75 31 U.S.C. § 9102.

corporate form,[76] the certification of the RCC as a frequency coordinator would be consistent with the GCCA.

*Section 155(c)(1).* Section 155(c)(1) of the Act authorizes the Commission to "delegate any of its functions . . . to a panel of commissioners, an individual commissioner, an employee board, or an individual employee[.]"[77] The fact that this particular provision of the Act permits the FCC to delegate only to employees of the FCC does not mean that the FCC may not, in accord with other provisions the Act, subdelegate to outside private parties such as the RCC. As explained above, Section 332(b)(1) explicitly authorizes the Commission "to utilize assistance furnished by advisory coordinating committees consisting of individuals *who are not officers or employees of the Federal Government*." In addition, Section 332(b)(3) states that "[a]ny person who provides assistance to the Commission under [Section 332(b)] shall not be considered, by reason of having provided such assistance, a Federal employee."[78] Section 332(b) thus leaves no doubt that the Commission may subdelegate to outside private parties who are frequency coordinators or members thereof. In light of this clear authorization, there is no legal basis for reading Section 151(c)(1) as restricting the Commission's subdelegation authority as set forth in Section 332(b).[79] Accordingly, the silence of the

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[76] *See* Supplemental Comments of Consensus Parties, App. C at C-5, § E ("the members of the RCC may elect to organize in corporate form").

[77] 47 U.S.C. § 155(c)(1).

[78] 47 U.S.C. § 332(b)(2).

[79] It is hornbook law that all provisions of a statute must be given force. *See FCC v. NextWave Personal Communications, Inc.*, -- U.S.--, 2003 Lexis 1054, *21 (Jan. 27, 2003). Section 151(c)(1) of the Act should thus not be interpreted as invalidating any provision of Section 332, and the Commission's extensive precedent in certifying frequency coordinators for the private land mobile and public safety radio services belies any contrary notion.

latter section with respect to delegation to private parties does not invalidate Congress's grant of such authority under Section 332(b), nor does it abridge the Commission's authority to certify the RCC as a frequency coordinator under Section 332(b).

*FACA.* Section 332(b)(4) states that "[a]ny advisory coordinating committee which furnishes assistance to the Commission under [Section 332(b)] shall not be subject to the provisions of the Federal Advisory Committee Act." The certification of the RCC as a Section 332 frequency coordinator would thus be fully consistent with FACA.

*Fifth Amendment.* The RCC would fully protect the due process rights of all interested parties, including the property rights of incumbent licensees. As explained above, the RCC would be certified as a frequency coordinator pursuant to Section 332 of the Act and the existing FCC rules and procedures established under that section. The RCC would function as an unbiased committee that is representative of all 800 MHz licensees, and would – like other frequency coordinators – merely implement FCC policies with respect to the 800 MHz band. All license modifications proposed by the RCC would be approved by the Commission in accord with established procedures. There is simply no plausible factual or legal basis for claiming that the RCC would operate in a manner that results in the "depriv[ation] of life, liberty, or property, without due process of law."[80]

## VII. INCUMBENT LICENSEES MUST PROVIDE THE INFORMATION NECESSARY TO EFFICIENTLY DEVELOP FAIR, IMPARTIAL AND PRACTICAL REALIGNMENT CHANNEL PLANS

The Consensus Plan would require that all incumbent licensees timely provide the Commission and the RCC a full description of their licensed systems as specified in

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[80] U.S. Const. amend. V.

Appendix C to the Supplemental Comments.[81] Before an incumbent licensee can be relocated to suitable replacement spectrum, the entities planning relocation must have all relevant information regarding the relocating system(s), including voice system information, data system information, console information, mutual aid information, and any other information about any aspect of the system(s) that is critical to planning the costs and logistics of system relocation. Certain commenters have raised concerns regarding the confidentiality of such information;[82] a few even oppose being required to provide it. These concerns are unjustified.

As the Consensus Parties have explained, the Commission should amend its rules, as necessary, to provide for the confidentiality of all exchanged information and to limit its use by the RCC and its constituent committees (or any participant thereto) solely to the frequency coordination and frequency planning activities necessary to complete 800 MHz realignment.[83] The Consensus Parties are confident that additional security safeguards can be developed and implemented as may be necessary in cooperation with the Commission. One possible approach is to implement the information management best practices developed by the Network Reliability and Interoperability Council ("NRIC") for safeguarding carrier and network data from possible misuse or misappropriation.[84] With such safeguards are in place, the mandatory provision of such

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81 *See* Supplemental Comments at 18-19; *id.*, App. C at C6-C16 (specifying necessary information for Phase I relocation) & App. C at C23-C28 (specifying necessary information for Phase II relocation).

82 *See, e.g.*, Comments of Motorola at 9; Comments of UTC/EEI at 10; Comments of Southern LINC at 31-33

83 Supplemental Comments at 19.

84 On December 20, 2002, the NRIC, an advisory committee comprised of telecommunications industry leaders and the Commission, voted to approve Physical

information is essential to implementing the realignment plan. Given the scope of the 800 MHz band realignment and the critical public interest goals involved, it is imperative that no single licensee or coterie of licensees be allowed to impede the process in pursuit of their own perceived ends.[85]

## VIII. THE PROPOSED BORDER AREA REALIGNMENT IS A WORKABLE REALLOCATION OF SPECTRUM IN A SPECTRUM-CHALLENGED ENVIRONMENT

The Supplemental Comments included proposed Border Area realignments for both the U.S./Canada Border Areas and U.S./Mexico Border Areas, based on five key principles.[86] Those five principles are: (1) Border Area realignment should be as consistent as possible with the realignment in the rest of the United States; (2) realignment should comply with existing international treaties; (3) public safety spectrum must be reallocated as far away from CMRS operations as possible, and never above 861 MHz; (4) realignment must take into account actual existing usage so that no licensee suffers a net loss of spectrum; and (5) the NPSPAC allocation should be relcoated as it is already allocated. Consistent with the Commission's direction in the NPRM,[87] the

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Security and Cyber Security Best Practices for the industry to use to assure optimal security of telecommunication networks against unauthorized third parties.

[85] Incumbent licensees that are opposed to providing relevant information cannot have it both ways. They cannot, on the one hand, claim that they will not receive comparable replacement spectrum under the Consensus Plan, and on other hand refuse to provide the very information that would allow the FCC and RCC to ensure that they in fact receive such replacement spectrum.

[86] Supplemental Comments at App. G and 35-42.

[87] The NPRM sought comment on "how any relocation plan would be implemented *consistent with* international agreements, in those areas of the United States that are adjacent to the Canadian and Mexican borders." *NPRM* ¶ 33 (emphasis added).

proposed Border Area *realignments do not require modification of existing international treaties*, making the Consensus Plan's Border Area realignments immediately achievable without the delay inherent in international negotiations that can involve political and other factors far beyond the scope of this proceeding.[88] Boeing, Pinnacle West and Consumers Energy object to the proposed realignments in the Border Areas as part of their overall opposition to the Consensus Plan. The Consensus Parties respectfully submit, however, that these commenters offer neither valid reasons why the proposed Border Area realignments will not work nor provide workable alternatives.[89]

The Consensus Parties agree in concept with certain commenters that the current 800 MHz land mobile band allocations in the Border Areas are not optimal from a U.S. perspective and could be renegotiated to the benefits of all licensees.[90] However,

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[88] CMRS-public safety interference has been identified in a number of Border Area markets, such as Seattle, San Diego and Detroit. *See* Comments of NPSPAC Region 43 Regional Review Committee at 1; Comments of King County Regional Communications Board at 2; Comments of the Communications Division, Michigan Department of Information Technology Representing Michigan Public Safety Communications System at 2; Comments of Snohomish County Emergency Radio System (SERS) at 1; Reply Comments of the City of San Diego at 1 (Aug. 7, 2002).

[89] For example, Consumers Energy objects to the Region 7 realignment plan yet provides absolutely no reason why it objects. ("Consumers' objections to the proposed treatment of Region 7 are essentially the same as its objections to realignment generally.") Comments of Consumers Energy at 7.

[90] *See* Comments of Boeing at 3; Comments of San Diego City and County at 2; Comments of Border Area Coalition at 5; Comments of Pinnacle West at 7, 17. For example, in the U.S./Mexico allocation between the two countries, each country controls exactly half of the 800 MHz land mobile radio band spectrum, even though the United States has greater population and presumably greater spectrum capacity needs on its side of the border. In U.S./Canada, the allocation between the two countries differs in each Border Region, but in some cases the United States has less than half of the total allocation.

resolution of the CMRS-public safety interference issue cannot be held hostage to international negotiations.

Therefore, given the confines of the existing international treaties, the Consensus Parties proposed Border realignment plans are as consistent as possible with the Consensus Plan's realignment in the rest of the United States while still designed to eliminate interference to public safety communications systems.[91] The proposed Consensus Plan realignment accomplishes this goal by separating the current interleaved operations of public safety licensees and cellularized operations to the maximum extent possible. Without realignment, incompatible operations would remain intermingled and more susceptible to interference.[92] Under the Border Area realignment proposal, public safety operations (including NPSPAC) will be moved to the lowest portion of the U.S. primary allocation in 800 MHz band and cellularized operations will be relocated to the highest portion of the band -- *just as in the rest of the United States*. In the U.S./Canada Border Areas, for example, the spectrum that is allocated for use by Canadian licensees on a primary basis provides a natural "Guard Band" *of between 9 and 21 MHz* between relocated public safety operations and all of the other operations in the band, including both B/ILT and cellularized operations.[93] Thus, Boeing's assertion that there is no Guard

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91 Supplemental Comments at 36.

92 See Comments of Palomar Communications, Inc. at 7 ("We wholeheartedly agree that realignment will help tremendously in resolving CMRS-public safety interference. . ."); Comments of Pinnacle West at 9 ("Ideally, completely separated spectrum for high-site and low-site technologies would provide full protection for Public Safety and CII [critical infrastructure industries].")

93 In the United States/Mexico Border Area, due to the allocation of spectrum between the two countries, public safety licensees cannot be relocated to the *lowest* portion of the 800 MHz band (starting at 851 MHz) but must start at the lowest end of the

Band in any of the Canadian border regions is simply untrue and evidences a lack of understanding of the Consensus Plan and the intended purpose of establishing "Guard Band" channels as part of the Consensus Plan for 800 MHz realignment.[94]

By making the Border Area realignments as consistent as possible with the rest of the United States realignments, licensees, particularly public safety, will have consistent allocations between states that have Border Area allocations and those that do not, making it easier to coordinate among similarly situated operators, whether they are public safety or B/ILT. For example, the NPSPAC realignment in Illinois, Indiana and Ohio will be in the same lower part of the 800 MHz band as the mixed Border Area and non-Border Area realignment in Michigan. Without a corresponding realignment of the Border Areas, public safety licensees would be faced with NPSPAC allocations between 851-854 MHz in one jurisdiction, while in the neighboring Border Area jurisdiction the NPSPAC allocation would remain at 866-869 MHz. This would create overwhelming

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*United States* allocation at 856 MHz. By ensuring that no Border Area licensee suffers a net loss of spectrum, the proposed Border Area realignment does not have a 2 MHz Guard Band as it does in the rest of the United States nor a 10 MHz Guard Band as it can in the United States/Canada Border Areas. The realignment, however, eliminates the interleaving of non-cellularized and cellularized operations and separates all non-cellular operations from cellular A and B band operations, which are significant contributors to CMRS-public safety interference.

[94] Comments of Boeing at i. As indicated, in the Canadian Border Areas there is a significant Guard Band between cellularized operations and public safety. Incumbent B/ILT and SMR operations, however, would be directly adjacent to the cellularized portion of the 800 MHz band. The focus of this proceeding is on the best methods to improve *public safety communications* at 800 MHz. The Consensus Parties have never agreed that a comparable Guard Band is needed for B/ILT and other non-public safety, non-cellularized incumbents as such operators have a greater ability to deploy interference resistant systems and do not have the public funding limitations that plague public safety communications providers.

coordination obstacles as well as possibly render mobile units unusable in the adjoining area.

Accordingly, the Consensus Plan proposes Border Area realignments that separate public safety operations from cellularized operations as much as possible, while maintaining the ban on cellular operators below 861 MHz, in order that future modifications to public safety equipment can take advantage of a contiguous non-cellularized channel block can be consistent across the United States.[95] As the Consensus Parties have previously explained, removing public safety operations to the lowest portion of the 800 MHz band will allow the future development of public safety radios to have improved roll off so that they will no longer "see" operations from the higher portions of the 800 MHz band.[96] By realigning the Border Areas in the proposed manner, these same handset benefits can be achieved without having to develop unique public safety radios designed just for Border Area use at higher costs.

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[95] The Consensus Parties recommended that any *secondary* use of channels by public safety licensees also be relocated to the lower part of the 800 MHz as much as possible so that those jurisdictions will benefit from realignment and not receive interference from primary CMRS operations. *See* Supplemental Comments at 38. The Consensus Parties agree with the Comments of King County and the NPSPAC Region 43 Regional Review Committee at pages 3 and 4 respectively that the Commission should be flexible and modify its rules, to the extent necessary, to ensure that public safety entities obtain access to new secondary channels in the lower part of the 800 MHz band in exchange for their secondary use channels in the upper-portion of the 800 MHz band.

[96] *See* Supplemental Comments at 43-44; Comments of King County at 4 ("One of the benefits of re-banding all public safety channels to the lower end of the 800 MHz band is to allow future migration to tighter receiver design specifications that could make beneficial use of both the 700 MHz and 800 MHz public safety bands, while also adding protection from non-public safety uses higher in the 800 MHz band.").

As noted above, the Consensus Parties developed the Border Area realignment plans using the principle that *no incumbent licensee should suffer a net loss of spectrum.* The Consensus Plan Border Area realignments protect incumbent licensees by ensuring that *all incumbents would be relocated within the 800 MHz band, channel-for channel.*[97] Accordingly, the Consensus Plan Border Area realignments do not attempt to maintain the number of channels allocated by the Commission in the 1980's to each channel pool, but rather the actual number of channels licensed to each incumbent today. The Commission's channel allocations have been modified through years of intercategory sharing and license assignments matching user demand to available spectrum resources.[98] The proposed Border Area realignments are based on current licensing to assure that no licensee will lose spectrum as a consequence of realignment.[99]

Accordingly, given the limited spectrum available for primary use by U.S. licensees in the Border Areas, the Consensus Parties submit that it is inconsistent with the

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[97] In keeping with the concept that no existing licensee loses spectrum, the Consensus Plan realignment reallocates the *entire* NPSPAC allocation (Border Area and non-Border Area), *regardless* of its existing usage, in order that public safety licensees can maintain as consistent a nationwide public safety allocation as possible, and in some cases, has room to grow their operations. Thus, for example, planned improvements to the State of New York's Statewide public safety network can still be accomplished despite a relocation of their spectrum.

[98] *See Implementation of Sections 309(j) and 337*, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 22709 (2000). In this proceeding, the Commission recognized that B/ILT licenses could be converted to CMRS use noting that a significant portion of the existing licenses had already been converted to commercial use -- as much as 50% of the Business licenses and up to 80% of the ILT spectrum nationwide.

[99] Thus, for example, in San Diego, while 120 channels are *allocated* to B/ILT services, approximately 70 of those channels are currently licensed to Nextel for cellularized service.

Commission's objectives in this proceeding to intentionally increase the number of channels designated for one type of user group at the expense of another in the Border Areas. Some commenters assert that Border Area realignment should provide for additional spectrum for public safety[100] or B/ILT[101] use in the Border Areas despite the limited spectrum available in those areas. Skewing the realignment channel plan to give these groups additional spectrum, however, would take spectrum away from current licensees and violate the principle that Border Area channel plans should be as consistent as possible with the rest of the United States,[102] that future non-cellularized radios not operate above 861 MHz, and that incumbent licensees not lose spectrum. The failure of some opposition commenters to accept this basic tenet of the Consensus Plan's Border Area realignments undercuts their assertions that that the Border Area realignments will not work, do not "retain" enough spectrum allocations for B/ILT[103], or will somehow redistribute additional spectrum to Nextel from B/ILT licensees.[104]

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100 Comments of City and County of San Diego at 4-5.

101 Comments of Boeing at 5-8; Comments of Consumers Energy at 11-12.

102 Under these commenters' approaches, additional spectrum for public safety or B/ILT would, by necessity, need to be redistributed from Nextel's operations above 861 MHz.

103 *See* Comments of Boeing at 5-8.

104 *See* Comments of Pinnacle West at 6.

## IX. THE COMMISSION SHOULD REJECT SOUTHERN LINC'S LATEST REQUEST FOR SPECIAL TREATMENT

In their Supplemental Comments,[105] the Consensus Parties adapted the Consensus Plan to address the particular concerns Southern LINC had previously raised regarding the Plan. With these modifications, the Consensus Plan will (i) permit Southern LINC to continue operations in the 800 MHz band with minimal channel relocations, (ii) provide Southern LINC with comparable replacement spectrum for any frequencies vacated at Channels 1-120, (iii) fully fund Southern LINC's relocation costs, and (iv) grandfather Southern LINC's system such that it can deploy both high-site and low-site cellularized architectures within its entire licensed footprint, as best meets its business strategy and customer needs. The Consensus Parties tailored the Consensus Plan in this fashion "to remove any concern Southern LINC may have regarding the Consensus Plan," and stated that, with the adoption of these measures, "the Commission would ensure that Southern LINC will retain full capacity and functionality under the Consensus Plan consistent with its stated position in this proceeding."[106]

In response, Southern LINC grudgingly "acknowledges the Consensus Plan's signatories' efforts to accommodate Southern's particular needs," but then makes a new demand for special treatment: it now requests that its 800 MHz facilities be relocated in their entirety to a contiguous block immediately adjacent to the cellular block.[107] This

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105 *See* Supplemental Comments at 44-46.

106 Supplemental Comments at 44, 46.

107 Comments of Southern LINC at 2, 34-39. Southern LINC proposes that the Relocation Fund cover all of the costs involved in relocating its facilities to this contiguous block of spectrum.

latest proposal directly contradicts Southern LINC's position in this proceeding in comments filed last September. Southern LINC stated that, if it is required to relocate, it should "be given channels comparable to the ones it is being forced to vacate," and any such relocation must "recognize [Southern LINC's] need for *non-contiguous* spectrum."[108] Southern LINC offers no explanation for this flip-flopping; its only proffered justification is that it is "necessary for purposes of regulatory parity."[109]

The Consensus Parties disagree. No statute or Commission rule or policy requires the relief proposed by Southern LINC, nor is there any public interest justification for Southern LINC's latest special treatment request – particularly as *it has nothing to do with preventing CMRS – public safety interference*. Southern LINC has repeatedly asserted that it "does not cause interference to public safety or B/ILT licensees and has no reason to believe it will do so in the future."[110] Southern LINC will be able to offer commercial mobile radio service as it has in the past (and in precisely the manner it proposed in prior comments in this proceeding.

Under its proposal, Southern LINC would relocate and consolidate all of its interleaved channels into its proposed expanded cellular block and have exclusive use of this block. The size of this expanded band would vary by region. Southern Linc does not provide a financial commitment to retune other licensees to achieve this contiguous spectrum, nor does it propose to fund its own retuning to accomplish this exclusive spectrum grab.

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108 Southern LINC Further Comments at 12, 26 (emphasis added).

109 Id. at 37.

110 Comments of Southern LINC at 36-37.

## X. THE ASSIGNMENT OF 1.9 GHz SPECTRUM TO NEXTEL IS AN INTEGRAL PART OF THE CONSENSUS PLAN AND IS DESIGNED TO MAKE NEXTEL WHOLE

The Commission should reject the repetitive contentions of CTIA and others that the Consensus Plan would provide Nextel with a spectrum windfall.[111] The replacement spectrum Nextel would receive at 1910-1915/1990-1995 MHz is crucial to the effectiveness of the Consensus Plan, as it would make Nextel whole in return for its substantial spectral contributions to the Plan.

Nextel will contribute extremely valuable assets and resources in conjunction with the Consensus Plan. It will surrender 10.5 MHz of spectrum in the 700, 800, and 900 MHz bands, obtained at a cost of approximately $2 billion, to provide replacement spectrum for relocating incumbent licensees in the 800 MHz band and make available additional spectrum for public safety communications and for private wireless licensees. Nextel will also contribute up to $850 million toward 800 MHz incumbent relocation, as well as cover its own relocation costs, which will include double relocations and will be significantly greater than any other licensee. In addition, as discussed above, Nextel will contribute its proportionate share of funds, above and beyond the $850 million for 800 MHz incumbent relocation, to relocate Broadcast Auxiliary Service licensees and reimburse UTAM once Nextel has been assigned to the 1910-1915/1990-1995 MHz bands.[112]

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[111] Comments of CTIA at 15-16; Comments of Verizon Wireless at 11-14; Comments of Cellular Coalition at 5-10.

[112] In addition, as discussed *infra*, Nextel also will contribute funds as part of the process of relocating Broadcast Auxiliary Service licensees and reimbursing UTAM upon the assignment to Nextel of the 1910-1915/1990-1995 MHz bands.

As noted above, any CMRS – public safety interference solution must involve Nextel, given its extensive licensing at 800 MHz and 900 MHz. Nextel has accepted this fact and taken a proactive role in developing CMRS – public safety interference solutions. By leveraging Nextel's commitment, the Consensus Plan offers a comprehensive 800 MHz realignment solution and 700 MHz and 900 MHz spectrum reallocations that balance the needs, rights and responsibilities of all affected licensees and users. Every provision of the Consensus Plan is interrelated and compliments every other provision to promote the public interest and achieve this outcome.

## XI. CONCLUSION

The Consensus Plan is the only viable proposal before the Commission that will satisfy the goals of this proceeding: remedying CMRS – public safety interference in the 800 MHz band, providing additional 800 MHz spectrum for public safety communications in the near term, and minimizing disruption to incumbent licensees. The Consensus Plan provides a balanced and widely-supported approach that is the product of thousands of hours of effort and a thorough and fair process.

Respectfully submitted,


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